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7. MYOPORUM  Solander ex G. Forster, Fl. Ins. Austr., 44. 1786 [Greek myo, to shut, and poros, hole, alluding to transparent spots on leaves closed with pellucid substance]  I

Robert E. Preston

Shrubs, trees; stolons absent. Stems ascending to horizontal, glabrous. Leaves persistent, cauline, alternate or rarely opposite, fleshy or not, with embedded, translucent glands; stipular lines absent; petiole present [absent]; blade margins entire or toothed. Inflorescences axillary, in clusters [flowers solitary]; bracts absent. Pedicels present; bracteoles absent. Flowers bisexual; sepals 5, calyx radially to bilaterally symmetric, campanulate, lobes oblong; petals 5, corolla white [rarely pale purple], spotted with purple [orange-brown to yellow or unspotted], radially to bilaterally symmetric, campanulate, abaxial lobes 3, adaxial lobes 2, (lobes glabrous [pubescent] abaxially, variously pubescent adaxially); stamens 4--8, adnate to corolla, equal, filaments pubescent [glabrous], staminode 0; ovary [2--]4[--6]-locular, placentation apical; stigma capitate or with 2--5 minute lobes. Capsules symmetrical, [dry] to fleshy and drupelike, ovoid to globose. Seeds 1--4, white to pale brown, ovoid to oblong or ellipsoidal, not winged. x = 18.

Species ca. 30 (3 in the flora); introduced, California; Indian Ocean Islands, Pacific Islands, Australia.

Myoporum species have been introduced for ground cover or hedges in coastal or low rainfall regions of many countries, especially M. insulare R. Brown, M. laetum, and M. montanum R. Brown. The gall-inducing thrip Klambothrips myopori, native to Australia, has recently been introduced to California and is causing substantial damage to Myoporum species used in landscaping (L. A. Mound and D. C. Morris 2007). The leaves and fruits of M. laetum and other Myoporum species are toxic to livestock; they contain ngaione, a furanoid sesquiterpene that causes photosensitization and liver damage (G. S. Richmond and E. L. Ghisalberti 1995; K. Parton and A. N. Bruere 2002).

1. Shrubs, prostrate; leaves narrowly oblanceolate, 2--4 cm; fruits white to pale brown

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1. Shrubs or small trees, broadly spreading; leaves narrowly elliptic to lanceolate, 5--14 cm; fruits dark reddish purple.

2. Leaves lanceolate, margins finely serrate distal to middle, glands conspicuous; flowers 2--4 per axil; anthers well-exserted from tube; immature fruits smooth........1. Myoporum laetum

2. Leaves narrowly elliptic, tapering proximally and distally, margins entire, glands inconspicuous; flowers 6--8 per axil; anthers slightly exserted from tube; immature fruits rugose.................................2. Myoporum acuminatum
1. **Myoporum laetum** G. Forster, Fl. Ins. Austr., 44. 1786 * Ngaio tree

Shrubs or small trees, broadly spreading, 3--10 m. Stems ascending to horizontal, much-branched; twig tips and young leaves bronze green, sticky. Leaves bright green, lanceolate, 5--12.5 x 1.5--3 cm, margins finely serrate distal to middle, glands conspicuous. Flowers 2--4 per axil; corolla white with purple spots, tube 3.5--4.5 mm, lobes equal, 4--5.5 mm, densely long-hairy adaxially; anthers well-exserted from tube. Capsules pale to dark reddish purple, ovoid, 5--10 mm, immature fruit smooth. Seeds oblong, 3--3.5 mm.

Flowering Jan--Mar--Aug. Open areas in grasslands, scrub, riparian habitats, generally coastal; 0--500 m; introduced; Calif.; Pacific Islands (New Zealand); introduced also in s South America (Argentina, Uruguay).

*Myoporum laetum* is commonly cultivated in coastal areas of California. Although first collected outside of cultivation in 1949, it was not recognized as an introduced element of local and regional floras until the 1970s. The species has naturalized mostly in southern California to San Luis Obispo County with a few populations north along the coast to the San Francisco Bay area.

*Myoporum insulare* R. Brown, also introduced in cultivation to California, is similar to *M. laetum*, and some reports of *M. laetum* are possibly *M. insulare*. *Myoporum insulare* has leaves that are lighter green when young, and the translucent glands of the mature leaves are less conspicuous. The flowers are slightly smaller with anthers that are only slightly exserted from the tube, and the fruits are smaller and globose.

2. **Myoporum acuminatum** R. Brown, Prodr., 515. 1810 * Waterbush

Shrubs or small trees, broadly spreading, 2--10 m. Stems ascending to horizontal, much-branched; twig tips and young leaves green to blackish, sticky. Leaves dark green, narrowly elliptic, (tapering proximally and distally), 5--14 x 1--3 cm, margins entire [obscurely serrate distal to middle], glands inconspicuous. Flowers 6--8 per axil; corolla white with purple spots on lobes and upper tube, tube 3--4 mm, lobes equal, 3--4.5 mm, long-hairy adaxially; anthers slightly exserted from tube. Capsules dark purple, ovoid, 4--7 mm, immature fruit rugose. Seeds ovoid-oblong, 2.2--2.5 mm.

Flowering Feb--May. Coastal sage scrub and chaparral; 0--100 m; introduced; Calif.; Australia.

*Cultivated in coastal southern California, Myoporum acuminatum is established in nearby wildlands.*

*Myoporum montanum* R. Brown, also introduced in cultivation to California, is similar to *M. acuminatum*, and some reports of *M. acuminatum* are possibly *M. montanum*. *Myoporum montanum* has narrower leaves (0.5--2 cm), anthers that are included in the tube, and the fruits are pink to light purple and smooth when immature.

3. **Myoporum parvifolium** R. Brown, Prodr., 516. 1810 * Creeping myoporum

Shrubs, prostrate, less than 0.5 m. Stems horizontal, much-branched, (1.5 m, often rooting at nodes); twig tips and young leaves green, not sticky. Leaves green, narrowly oblanceolate, 2--4 x 0.5 cm, margins entire to sparsely serrate distal to middle, glands inconspicuous. Flowers 1--3 per axil; corolla white, purple-spotted at base of lobes, tube 2.5--3 mm, lobes equal, 3--4 mm, sparsely pubescent adaxially; anthers well-exserted. Capsules white to pale brown, globose, 5--7 mm, fleshy. Seeds ovoid to ellipsoid, 2 mm.

Flowering Apr--Oct. Vacant lots, open, mesic areas in chaparral; 100--300 m; introduced; Calif.; Australia.

*Myoporum parvifolium* is widely cultivated as a ground cover in the southwestern United States; it appears to be established in the urban canyons of southern California.